605
v. 28

The Chemical Age

Index to Volume XXVIII. January—June, 1933

A

"Abracide"—A New Product of British Manufacture, 379
Accidents in Industry, Prevention of, 356; American Safety Council Activities, 532
Achema VII and Rubber Industries Exhibition, 102
Advertising Convention, 471
Africa, North, Trade with, 559; Portuguese East, Economic Conditions in, 458; Africa, South, Eucalyptus Oil Manufacture, 201; Paint Industry, 533
Air Pollution in Cities, 178
Alcohol, Denatured, Corrosion Risks with, 400; Distillation from Maize, 166; Industrial, Production of, from Grain, 118; Power, from Molasses, 269
Alcohols, Aliphatic, and their Derivatives, 486; Higher, Synthesis of, 178
Alloys, Quenching and Tempering in, 433
Alumina, New Source, 193; Increasing Importance of, 596
Aluminium Alloys in Sea Water, Protecting, 98
Aluminium Chloride, Anhydrous, New Process for, 54
Aluminium Sulphate in Finland, 526
Amalgamated Society of Dyers, 154, 277
America, Central, Depression in, 536; Sulphur Industry, 193
American Chemical Society, 40, 310, 332, 568
American Institute of Chemical Engineers, 25th Anniversary, 445
American Society for Testing Materials, 541
Ammonium Nitrate, Manufacture of, 146
Ammonium Phosphate: New Manufacturing Process, 81
Analysis by Colorimetric Methods, 179
Analysis, Modern, The Technique of, 545
Anglo-German Trade Association, 499
Apparatus, Foreign Scientific, 271
Argentine, Agreement, 438; Trade Mission, 128, 138
Association of British Chemical Manufacturers, 13, 368
Atmospheric Pollution, Investigation of, 354
Australia: Sulphur Industry, 13
Austrian Heavy Chemical Manufacture, 273

Authors—
Armstrong, Professor H. E.: The Institutes of Chemistry, 4
Benn, Sir Ernest, J.P.: This Spending Push, 290
Bevan, J. G. M.: The Economics of Solvent Recovery, 485
Brett, C. W.: Chemical Plant Repairs by Scientific Welding, 525
Cremer, H. W.: The Training of the Chemical Engineer, 136
Dixon, Ronald A. Martineau: Joseph Priestley—the Father of Modern Chemistry, 243
Gibbs, W. E.: The Functions and Training of a Chemical Engineer, 67
Griffiths, Hugh: The Carbon Adsorption Process of Solvent Recovery, 481
Gryder, D. A.: Colour Fastness Problems of the Dye House, 550
Harrison, Woodford H.: The Manufacture of Printing Ink, 459
Krumbhaar, Dr. W.: No Illusions about Chlorinated Rubber, 507
MacGregor, James: Leaves from the Notebook of a Chemical Engineer, 475
Laurie, L. G.: Recent Developments in Textile Finishing, 572
Price, S. Reginald: Recent Progress in Solvent Recovery Technique, 478
Richellato, Edwin C.: The Dimethyl Glyoxime Reaction for Nickel, 574
Sartorius, Dr. F.: A New Division of the Smaller Gram Weights, 384
Seymour, Hartland: Welded Plant in the Chemical Industry, 237
Turfery, J. C. O.: Analysis by Ultra-Violet Light, 220
Underwood, A. J. V.: Notes on the Testing of Distillation Plant, 23

Authors—*continued.*
West, J. H.: The Aims of Research, 215; Bridging the Gap between Laboratory and Works, 380; The Design of Fractionating Columns, 477; The Functions and Training of a Chemical Engineer, 94; Purchasing Chemical Plant: Tests and Guarantees, 3.
Williams, F. W. R.: The Maintenance of Crushing and Screening Machinery, 261
Withey, S. Howard: Chemical Engineering Overhead Charges, 328; Computation of Profits for Income Tax Purposes, 571; Depreciation of Chemical Plant: Financial Accounting, 72; Financial Position of the Chemical Industry, 216, 451
Autoclaves, Glass, for Laboratory Use, 396

B

Balances, Laboratory, Three New, 389
Barytes in Scotland, Production of, 288
Basic Slag, Manufacture of, 438
Beet Sugar Factory, Filtration in a, 357; Effluents, 425
Beilby Memorial Awards, 412
Belgium, Economic Conditions in, 531; Potassium Sulphate, 152; Chemical Trade Declines, 439
Benn Brothers, Ltd.: Bouverie Players' Triumph, 54
Benzol Production Decreases, World, 280
Benzyl Cellulose Moulding Compositions, 529
Benzyl Chloride, 522
Birmingham City Analyst's Report, 579
Bismuth in Peru, Production of, 30
Boilers, High Pressure, 95
Books Received, 63, 107, 154, 229, 278, 296, 347, 490, 498

Book Reviews—
American Institute of Chemical Engineers, Transactions of, 534
Analysis, Qualitative Chemical (Briscoe), 194
Catalysis and its Industrial Applications (Maxted), 362
Chemical Engineering, Unit Processes and Principles of (Olsen), 194
Colloides, Les (Barry), 194
Drugs, The Chemistry of (Evers), 362
Explosives (Marshall), 194
Films on Metals, Protective (Hedges), 362
Kinetics of Homogeneous Gas Reactions, The (Kassel), 194
Manuel de Chimie Gazière (Deville), 194
Mond, Alfred, First Lord Melchett (Bolitho), 287
Patents Explained (Wildbore), 544
Selling Game, The (Notley), 534
Society of Chemical Industry, Annual Reports of the, on the Progress of Applied Chemistry, 362
Boots Pure Drug Co.: Anglo-American Deal, 36, 43, 437, 553
Borates in Industry, 27
Borough Oil and Colour Students' Association, 164
Brazil, Trade Outlook in, 493
Brewery Water Purification, 139
British Association, 61, 499
British Association of Chemists, 40, 128, 247, 270, 307, 446, 492, 516, 530
British Chemical and Dyestuffs Traders' Association, 487
British Chemical Plant Manufacturers' Association, 90, 91
British Colour Council, 199, 358
British Industries Fair, 19, 143, 170, 198, 227, 513
British Industries House, 146
British Plastic Moulding Trade Association, 258, 285
British Road Tar Association, 12, 499
British Science Guild, 312, 454
British Standards Institution, 2, 35, 277, 353, 537
British Sulphate of Ammonia Federation, 20, 26
British Wood Preserving Association, 191
Bromide, A New Method for the Production of, 221
Bush & Co., Ltd., W. J., Explosion at Works of, 293, 313, 552
Business, Controlling the Big: Danger of Statistics, 580
Business Research and Management Association, 113

C

Calcium Nitrate, New Manufacturing Process for, 30
Calendars and Diaries Received, 14
Canada: Clay Products Industry, 69; Natural Gas, 107; Radium Extraction, 53; Abrasive Plant, Extension to, 273; Fertiliser Industry, 364; Metal Mining Industry, 244
Canadian Institute of Mining, 471
Candle Making, Modern, 139
Carbazole, Pure, Manufacture of, 31
Carbon Adsorption Process of Solvent Recovery, The: Hugh Griffiths, 481
Carbon Bisulphide Dangers, 39
Carbon Black, A Substitute for, 533
Cask Manufacture, Veneers for, 31
Cawnpore Technological Institute, 161
Cellulose Acetate Foils, The Manufacture of, 361
Cellulose Esters and Ethers, Applications of, 567
Cellulose, Sugar and Alcohol from, 521
Cements for Furnace Settings, 234
Centenaries of 1933, Chemists in the, 75
Centrifugal in the Chemical Works, The, 305
Centrifugal Separation and Decantation, 326
Ceramic Society, 346, 373, 428
Chemical Engineering Group, 111, 405
Chemical Engineering Overhead Charges: S. Howard Withey, 328
Chemical Engineer, Leaves from the Notebook of a: James MacGregor, 475
Chemical Engineer, The Training of the, H. W. Cremer, 136
Chemical Engineer, The Functions and Training of a: J. H. West, 94
Chemicals for Analysis, Research and Industry, 332
Chemical Society, The, 253, 334, 456, 513; Ninety-Second Annual Meeting, 301
Chemical Workers' Union, 315
Chemi-Luminescence, 535
Chemist in Industry, The, 283
Chemist in the Far East, The, 503
Chemistry, The Application of, to Engineering, 432
Chemists Club of New York, The, 563
Chemists in the Centenaries of 1933, 75
Chemists' Assistants' International, 272
Chemists' Professional Interests, 365
Chile, Economic Conditions in, 51; Iodine Sales Decline 316; Nitrate Position and Sales, 330; Production of Calcium Carbide, 414
Ciba Trading Results for 1932, 415
Cinchona Cultivation in Guatemala, 78
Cleanliness in Modern Food Factories, 76
Cleaning, Dry, Industry, A Glimpse of the, 483
Coal-and Oil, Competition between, 312
Coal, Britain's, Problems, 221
Coal Distillation: Proposed New Plants in Mining Centres, 396
Coal Tar Naphtha, 224
Coils, Battery of, for use in a Paraffin Wax Separating Plant, 523
Colorimeter, Absolute, in the Laboratory, 388
Colorimeter, A New Photo-Electric, 30
Colour Cards, New Autumn, 199
Colour Fastness Problems of the Dye House: D. A. Gryder, 550
Colour Standards, British, 520, 556
Colour Vision, Progress in the Study of, 268

Commercial Intelligence—
Allen, Craig & Co., Ltd.; Voluntary Liquidation, 183
Alliance Artificial Silk, Ltd.; Reduction of Capital, 513

Commercial Intelligence—*continued.*
Atlas Artificial Silk Processes; Statutory Meetings, 151
Electro-Chemical Installations, Ltd.; Petition for Compulsory Winding up, 445
Jones, Samuel: Bankruptcy Proceedings, 40, 122
Nor-Rust Liquid Lead Co., Ltd.; Winding-up Petition, 296, 320, 342
Pease & Partners, Ltd.: Scheme of Arrangement Sanctioned, 80
Pendleton Oil and Chemical Co., Ltd.; Company Winding up, 296
Rayon Manufacturing Co. (1927), Ltd.; Bankruptcy Proceedings, 15
Sensible Heat Distillation, Ltd.; Statutory Meetings, 183
Stevenson & Co., H. E.: Meeting of Creditors, 41
Welbeck Distillation Co., Ltd., The; Voluntary Winding up, 253

Company News—
Aberthaw and Bristol Channel Portland Cement, 584; Acetex Safety Glass, Ltd., 15, 318; Achille Serre, 416, 420; Alliance Artificial Silk, Ltd., 273, 584; Allied Chemical and Dye Corporation, 297; Aluminium Corporation, 321; Amalgamated Metal Corporation, Ltd., 498, 584; Amalgamated Zinc (de Bavay's), 205; American I.G. Chemical Corporation, 564; Anglo-Continental Guano Works, Ltd., 559; Apex (British) Artificial Silk Co., 176; Ashmore, Benson, Pease & Co., Ltd., 17; Associated Dyers and Cleaners, 400, 514, 518, 537; Associated Portland Cement Manufacturers, Ltd., 251, 255, 466
Babcock & Wilcox, Ltd., 374; Baird & Tatlock (London), Ltd., 8; Barrow, Hepburn & Gale, Ltd., 103; Bede Metal and Chemical Co., 297; Bemberg Co., J. P., 59, 494; Benn Brothers, Ltd., 62; Benzol & By-Products Co., 542; Bleachers' Association, Ltd., 542; Blundell, Spence & Co., 82, 87; Blythe & Co., William, 255, 297; Boake Roberts & Co., A., 542; Boots Pure Drug Co., 444, 445, 542, 553, 564; Borax Consolidated, Ltd., 155, 202, 321; Bowaters Mersey Paper Mills, Ltd., 103, 293; Bradford Dyers' Association, Ltd., 183, 205, 542; Branston Artificial Silk Co., Ltd., 17; Britannia Iron and Steel Works, Ltd., (Branch works of Eisen-und-Stahlwerke), 373; British Alkaloids, 564; British Aluminium Co., 255, 273; British Bemberg, Ltd., 126; British Cotton and Wool Dyers' Association, Ltd., 470; British Drug Houses, Ltd., 297, 321, 368, 584; British Enka Artificial Silk Co., 293, 342; British Glues and Chemicals, 444; British Goodrich Rubber Co., 103, 224, 518; British Match Corporation, Ltd., 440, 444; British Oil and Cake Mills, Ltd., 63, 273, 318; British Oil and Guano Co., 444; British Oxygen Co., Ltd., 420, 470, 494; British Portland Cement Manufacturers, Ltd., 255; British Tar Products, 400; Briton Ferry Chemical and Manure Co., 297; Brittany China Clay Co., Ltd., 541; Broken Hill Proprietary Co., Ltd., 400; Broken Hill South, Ltd., 420; Bryant & May, Ltd., 59, 369, 400; Burt, Boulton & Haywood, Ltd., 347; Bush & Co., W. J., 542, 552
Calico Printers' Association, 205, 253; Canada Cement Co., 63; Canadian Celanese, Ltd., 251, 564; Canadian Industries, Ltd., 255, 321; Canning Town Glass Works, 297; Cape Asbestos Co., 542; Cape Explosive Works, Ltd., 82; Celanese Corporation of America, 225, 420; Central Portland Cement Co., 342; Chemical and Metallurgical Corporation, 514; Chemical Bank and Trust Co.

Company News—*continued.*

of New York, 63; Chloride Electrical Storage Co., Ltd., 470; Clover Paint and Composition Co., Ltd., 518; Consolidated Mining and Smelting Co., 321; Cooper, McDougall & Robertson, Ltd., 201, 205, 251; Cory, Wm., & Son, Ltd., 584; Courtaulds, Ltd., 179, 183; Crosfield, Joseph, & Sons, Ltd., 374; Crosfields Oil & Cake Co., 444; Crossley Brothers, 183

De Beers Consolidated Mines, Ltd., 470; Delta Metal Co., 255; Distillers Co., Ltd., 59, 63; Dominion Tar and Chemical Co., 255; Doulton & Co., Ltd., 518; du Pont de Nemours & Co., E. I., 155, 444

Eastman Kodak Co., 347; Ebbw Vale Steel Iron and Coal Co., 580; Electric Furnace Co., Ltd., 584; Electrolytic Zinc Co. of Australasia, 126, 225; Ely Beet Sugar Factory, 584; English Beet Sugar Corporation, 564; English China Clays, Ltd., 580; Etablissements Kuhlmann, 579; Evans Sons, Lescher & Webb, Ltd 225

Fairy Dyes, Ltd., 106; Field, J. C. & J., 542; Firth, Thos., & John Brown, Ltd., 374; Forster's Glass Co., 584; Fuller's Earth Union, 518.

Gas Light and Coke Co., 106, 128, 141; Gas Purification and Chemical Co., 321; Graphite Oils, 297

Hadfields, Ltd., 347; Hope & Son, Charles, and H. W. Jewesbury & Co., 320

I.G. Farbenindustrie, 347; Indestructible Paint Co., Ltd., 225; India Rubba Gutta Percha and Telegraph Works Co., Ltd., 580; International Aluminium Co., 321; International Match Corporation, 82; International Nickel Co., Ltd., The, 59, 293, 486; International Nickel Co. of Canada, 151, 254, 564; International Paint and Compositions Co., Ltd., 225, 295; International Petroleum Co., 183; Inveresk Paper Co., Ltd., 440; Ipswich Beet Sugar Factory, 584

Kali-Chemie, A. G., 579; King's Lynn Beet Sugar Factory, 584; Knight, John, Ltd., 273, 318

Laporte, Ltd., B., 498; Lautaro Nitrate Co., Ltd., 16, 102; Lever Bros., Ltd., 420

Magadi Soda Co., Ltd., 321, 368; Mandleberg & Co., Ltd., J., 420; Minerals Separation, Ltd., 255; Molassine Co., 564

National Drug and Chemical Co. of Canada, 470; Newcastle Gas Co., 227; New, G. and S., Processes Syndicate, 17, 420; Newton Chambers & Co., 400; New Transvaal Chemical Co., 63, 225; Niger Co., Ltd., 421; Nitrate Producers' Steamship Co., 498; Nitrate Railways Co., Ltd., 470; North Broken Hill, Ltd., 205, 518

Oakey & Sons, John, 205; Oxford and Shipton Cement, Ltd., 224

Park Gate Iron and Steel Co., Ltd., 420; Pease & Partners, Ltd., 54; Piggott & Co., Ltd., Thomas, and Horseley Bridge and Engineering Co., Ltd., Merger of, 278; Pinchin, Johnson & Co., Ltd., 251, 322; Powell Duffryn Steam Coal Co., The, 255

Rayon Manufacturing Co. (1927), Ltd., 103; Reckitt & Sons, Ltd., 205, 374, 498; Redfern's Rubber Works, Ltd., 17, 40, 61, 155; Rio Tinto Co., Ltd., 400

Salt Union, Ltd., 183, 255; Shawinigan Water and Power Co., 155, 374; Sheffield Steel Products, Ltd., 15; Shuttleworth Bleaching Co., 126; Snia Viscosa, 179, 205; Societe des Textiles Chimiques due Nord et de l'Est, 103; Solidol Chemical Co., 205; Southall Bros. and Barclay, Ltd., 226; South Metropolitan Gas Co., 87; Staveley Coal and Iron Co., Ltd., 61, 205; Swedish Match Co., 103, 537

Tarmac, Ltd., 255, 584; Tate & Lyle, Ltd., 201, 470; Taylors (Cash Chemists) Trust, Ltd., 155; Tharsis Sulphur and Copper Co., 321; Thew's, Ltd., 182; Tomaszow Artificial Silk Works, Ltd., 374; Trinidad Leaseholds, Ltd., 420

Unilever, Ltd., 347; Unilever, N. V., 347; United Dyewood Corporation, 498; United Glass Bottle Manufacturers, 225; United Indigo and Chemical Co., Ltd., 584; United Match Industries, Ltd., 201; United Molasses Co., Ltd., 338, 347; United Premier Oil & Cake Co., Ltd., 444; United Steel Works at Essen, 580; United Turkey Red Co., Ltd., 293

Veno Drug Co., Ltd., 542; Vereinigte Glanzstoff-Fabriken Co., 580; Viscose Development Co., 205

Wall Paper Manufacturers, Ltd., 420; Watson, Laidlaw & Co., Ltd., 322; Waxed-Papers, Ltd., 225; Widnes Soap Co., 179; Wright, Layman & Umney (1932), 297

Yahagi Power Co., 121; Yorkshire Dyeing and Proofing Co., 321; Yorkshire Dyeware and Chemical Co., 514, 518; Yorkshire Indigo, Scarlet and Colour Dyers, 205

Zinc Corporation, 542

Company Registrations at Somerset House, 48

Co-operative Selling in Overseas Markets, 91

Copper Refining Process, New, 125

Copper Sulphate in Argentina, 533

Correspondence—

Academical Analysis (A.I.C.), 11

Balances, Stainless Steel (Nicol), 436; Budget Reform, Suggested (Gledhill), 260

Chemical Engineer, Functions and Training of a (Gibbs), 135, (West), 135

Dyers' Federation, A New (Wenham Bros.), 331

Fertilisers and Crops (Russell), 535

Laboratory Cramming, Evils of (Ab Initio), 81, (Pro Bono Chimistae), 117; Low Temperature Carbonisation (Antrobus), 134

Moths, Clothes, Destruction of (Clark), 135

Personnel, A Question of (Foxwell), 134; Personnel, Sir Robert Witt on (Witt), 288; Public Work, A Fine Piece of (Benn), 353

Research and Industry (Dreaper), 331; Research, Compulsion in, 213; Research Handbook, A New (Holman), 260; Rubber, Chlorinated, Applications of (Dyche-Teague), 552; Rubber Research, The Importance of (Schidrowitz and Stevens), 310

Science and Progress (Dreaper), 11; Steel, Stainless, Developments (Metallion, Ltd.), 491

Technical Education (A.I.C.), 353; (B.Sc.), 410; Thermo-Chemistry, Papers on (Carr), 199

Unemployed, Educated (British Executive Employment Society), 576

War, Chemists and the Next (Corr), 161; (Pratt), 199; World Power Conference Papers (Gray), 213

Corrosion Risks with Denatured Alcohol, 400

Cosach Nitrate Combine, 16, 37, 44, 178, 200, 253, 373, 422, 452

Cosmetics, Modern, 572

Costing in the Chemical Industry, 133

Cotton and Rayon Materials, Manufacture and Dyeing of, 49

Cotton Mercerisation, 243

"Creep" in Steel, 111

Creosote as Fuel, 415

Crushing and Screening Machinery, The Maintenance of: F. W. R. Williams, 261

Cyclic Compounds, The Stability of, 190

Cyclohexanone, Improved Grade of, 494

Czechoslovak Trade in 1932, 273

D

"Daily Mail" Ideal Home Exhibition, 247

Danish Paint and Varnish Industry, 250

Daylight, Artificial, 268; A New System of, 511

Dead Sea Salts, 465

Degreasing: A New Colloidal Cleaner, 396

Degrees, Spurious, 465, 519

Dehydration, Determination of, 195

Department of Scientific and Industrial Research, Annual Report of, 209

Disarmament, Scientific, 270

Diseases, Industrial, of the Skin, 509

Disinfection in Norway, 534

Distillation Plant, Notes on the Testing of: A. J. V. Underwood, 23

Distilling Water by Electricity, 269

Dorman Long & Co., Sulphuric Acid Plant Wrecked, 368

Drug and Fine Chemical Manufacturers' Association, 154, 199, 315

Drums for the Chemical Manufacturer, 292

Dry Ice, New Applications for, 82

Drying Enamels, Lacquers and Varnishes, 222

Duddell Medal, Award of the, 125

Dust Recovery and Fume Elimination, 429

Dutch Standardisation of Natural Gums, 164

Dyeing, Modern, 317; Silk, 74

Dyestuffs, Insoluble Azo-, Containing Sulphur, 187; Licences, New, 36, 112, 224, 342, 438, 558; New British, 123, 436, 466; Output in the United Kingdom, 524

E

Ebonite in Chemical Works, The Use of, 266

Ecuador, Economic Conditions in, 460

Editorial Comments—

Alcohol through the Ages, 1; American Crisis, The, 208; Art and Science, 323

Backbone of British Industry, The, 1; Boots' Drug Deal Hitch, 43; British Industries Fair, 19, 132; Budget, The, 375

Chemical Engineer, Training the, 89, 109; Chemical Production, Trend of, 544; Chemicals, Imported, 404; Chemical Society, The, 299; Chemicals, Exports and Imports of, 565; Chemist in Industry, The, 299; Chemistry and Gold, 109; Chemists, Finding Work for, 90; Chile, Events in, 44; Clayton, Sir George, 565; Coke Oven Gas in Chemical Industry, 44; Colleges, Competition from the, 447; Colour Standards, British, 520; Construction and Reconstruction, 376; Consultants and Consulting, 447

Degrees, Spurious, 519; D.S.I.R., The Report of the, 232

Economic Recovery, A Contribution to, 109; Employment, Increased, 544; Engineering, The Profession of, 66

Factories, New, A Town of, 158; Factory Cleanliness, 65; Fertilisers and Crops, 423; Finance and Industry, 501; Finance, Questions of, 403; Foreign Chemists in British Factories, 19; Formaldehyde, The Case of, 424; Frankland, The Memory of, 65; Fuel Research Board, 186; Fuel Research in Great Britain, 131; Fuel, Solid Smokeless, 110

German Dye Exports, 110; German Trade Agreement, The, 424; Germany, Conditions in, 19; Government and Industry, 281

Health and Efficiency, 566; Hydrocarbons, The Combustion of, 281

Imperial Chemical Industries Recovery, 258, Report, 309; Imperial Institute, Activities of the, 565; Industrial Districts, The Lay-out of, 324; Industry and Taxation, 65; Information, Interchange of, 257; Inventions in 1932, 2

Laboratory Equipment, 375; Leverhulme Research Fellowships, 519

Maintenance, Chemical Works, 231; Men and Experience, 131; Mixing, Problems of, 132

Nitrogen, A New Function for, 350

Oils, Heavy, The Duty on, 423; Overseas Trade in 1932, 43

Personnel, A Study of, 207; Plant, Chemical, Co-operative Selling of, 90; Plastics, Developments in, 282; Plastics, Royalty and, 258; Prince's Appeal, The, 66; Pulverised Fuel Burner, The, 186

Radiation and the Chemist, 502; Re-Assessment, The Approaching, 208; Research, Compulsory, 207; Research, Fundamental, 110, 520; Research, Government Assistance in Private, 185; Research, Industrial, 157; Rubber Industry, The Position in the, 157; Russian Patent Laws, 2

Salesmen and Selling, 501; Salesmen's Reports, 448; Science and Crime, 566; Science and Politics, 448; Science, Pure and Applied, 349; Sciences, Inter-relationship of the, 543; Service, The Modern Idea of, 447; Severn Barrage, The, 281; Solvents, Growing Importance of, 473; Specification, A Draft, 2; Statistical Methods in Industrial Practice, 349; Sugar, Synthetic, 543; Sulphate of Ammonia Market, The, 20

Taxation, A Renewed Call for Reduced, 208; Tax Burden, Danger of the, 474; Technical Education, 300, 404

Unemployed Chemists, 473; Unemployment and Public Expenditure, 323

Warfare, Chemical, 257; World Economic Conference, 543; World Power Conference, This Year's, 2

Empire Products, A Wider Utilisation of, 549

Engineer, Chemical, The Functions and Training of a; W. E. Gibbs, 67

"Engineering: A Career—A Culture," 66

Engineering, Chemical, The Present Trend of, 112

Ethylene, Catalytic Oxidation of, 464

Exhibition, Anglo-Palestine, 536

Experience, The Importance of, 111

Explosion Flames, Examination of, 526

F

Factory Cleanliness, 65

Fatality: Overdose of Phosphorus, 438

Fats, Animal and Plant, 265

Fauser Synthetic Ammonia Process, 367

Federation of British Industries, 62

Fermentation Processes: Yield of Alcohol, 575

Ferric Oxides, Pure, Manufacture of, 138

Fertiliser, A Promising New, 192; British Synthetic, Industry, 12; Factory in Greece, New, 465; Molasses as a, 309; Fertilisers and Crops, 423; Synthetic, Fertilisers' Cartel, 320

Films, Surface, The Study of, 122

Filters, Seitz, 523

Filtration, Air, Modern Methods of, 96

Financial Position of the Chemical Industry: S. Howard Withey, 216, 451

Finnish Imports of Sodium Sulphate, 112, 510

Fire at a Yorkshire Chemical Works, 289

Food Industry, Non-Ferrous Metals in the, 140

Food Labels, Misleading, 579

Forest Products Research, 48

Fractionating Columns, The Design of; J. H. West, 477

France: Essential Oil Situation, 152; Linseed Oil Industry, 270; Mineral Acids, 316; New Fertiliser Compound, 71; Carbonisation Plant, New, 126; Nitrogen Commission, 533

Frankland, Sir Edward, Professor Armstrong's Tribute to, 65, 79

French Chemical Society, The, 579

Fuel, Pulverised, Use of: The "Grid" Burner, 552

Fuel Research in Great Britain, 120; Annual Report, 165

Fuels, Present Trends in the Choice of, 164

Fuel, Solid Smokeless, 78

Future, Confidence in the, 192

G

Gas, Coke Oven, Organic Compounds from, 45; Fair Play for, 124; Substitute for Petrol, 107

Gas Engineers Visit Spain and Portugal, 569

Gases, Boiler Flue, Minimising the Nuisance from, 167; Malodorous, 338

Glasgow, Chamber of Commerce, 499; Oil Trade, 178; Researches, 493

Germany: Alcohol Situation, 414; Arsenates, Exports of, 152; Chemical Export Trade, 262; Chemical Industry Conditions, 25; Chemical Society, 499; Coal Tar Products, 76 Notable Research Centre (The Metallgesellschaft A.G.), 407; Hydrogenation Industry, 44; Hydrogen Peroxide Production, 152; Lamp Black, 201; Magnesium Chloride Exports of, 439; Mercury Market, 304; Paint and Varnish Industry, 316; Professors Resign, 397, 471; Superphosphate Sales, 30; Synthetic Waxes, 152, 316; Trade Agreement, 424; Wood Preservative, A New, 271; Zinc White Production, 264

Glass Lined Equipment at Modern American Works, 505

Glass, Nessler, A New Type of, 390; Safety, 415; Toughened Plate, 414

Glue, Bone, New Uses for, 337

Glycerine from Sugar, 149

Grape Juice Production, 489

Greases, Stability of, 278

Greece, Heavy Chemical Production in, 355

Guatemala Paint Market, The, 387

H

Heat Insulation Materials, The Choice of, 121

Human Factor in Industry, The, 217

Humidity, Control of, 391

Hungary, Chemical Industry in, 316, 363, 536; Production of Zinc Oxide, 152

Huxley Memorial Lecture, 437

Hydrobromic Acid, Manufacture of Pure, 533

Hydrocarbon Combustion, The Chemistry of, 259

Hydrocyanic Acid: A Method for Colorimetric Determination, 530

PUBLIC LIBRARY
DETROIT MICH

Hydrogen, Manufacture of, 287
Hydrogen Peroxide in Belgium, 533; Italy, 484
Hypochlorite Disinfectants, 10

I

I.G. Farbenindustrie Report, 102, 338; Annual Meeting, 415
Imperial Chemical Industries, Ltd., 62, 173, 182, 245, 253, 258, 296, 311, 329, 399, 436, 445, 516, 541
Imperial Institute, Annual Report, 549, 565
Import Duties Advisory Committee, 37, 86, 228, 373, 446, 499
Income Tax, Computation of Profits for; S. Howard Withey, 571
"Independent, The," 558
India, Bleaching Materials, 352; Chemical Industry, 242; Chemical Imports, 53, 334; Development of the Pharmaceutical Industry, 52; Heavy Chemical Industry, 439; Santonin Production, 81; Shellac Industry, 80; Oil Seeds Cess, 439
Ink, Printing, The Manufacture of; Woodford H. Harrison, 459
Insecticide, Rotenone as an, 568
Institute of Brewing, 62
Institute of Chemistry, 19, 40, 67, 81, 111, 179, 190, 199, 265, 365, 445, 492, 503, 513
Institute of Cost and Works Accountants, 133
Institute of Fuel, 45, 121, 167
Institute of Metals, 36, 140, 150, 218, 399, 433
Institute of Physics, The, 40, 61, 187, 277, 445, 516
Institute of the Plastics Industry, 286
Institutes of Chemistry; Professor H. E. Armstrong, 4
Institution of Chemical Engineers, 14, 21, 23, 159, 162, 366
Institution of Electrical Engineers, 95
Institution of Gas Engineers, The, 520, 526, 569
Institution of Mechanical Engineers, 541
Institution of Mining and Metallurgy, 292
Institution of Petroleum Technologists, 17, 139, 227
Institution of the Rubber Industry, 117, 126, 182, 283, 416
Insulating Materials, Moulded, 513
International Congress for Scientific Management, 499
International Oil Industries Exhibition The, 294
International Road Tar Conference, 563, 573
International Society of Leather Trades Chemists, 17, 267
International Superphosphate Manufacturers' Association, 105
Inventions in 1932, 2, 528
Iodine in Spain, Manufacture of, 30
Irish Free State; Chemical Trade, 439, 499, 517; Imports and Duties, 471; Gypsum Deposits, 471; University College ,Cork, Peat Bog Research, 541; Pharmacopœia, 288
Iron and Steel Institute, 440
Iron and Steel Structures, The Protection of, 359
Italy, Castor Oil Plant, 273; Chemical Trade Conditions, 34; Copper Chloride, Fungicide, 152; Research on Beryllium, 152

J

Japan: Caustic Soda and Bleaching Powder, 533; Chemical Production, 458; Proposed Dye Plant, 368; Electrochemical Industry, 195; Nitrogen Supplies, 52
John Benn Hostel, 563

K

Kent, George, & Co., Ltd.; (The Efficient Metering of Liquids), 77

L

Labelling of Paint Containers, The, 316
Laboratory and Works, Bridging the Gap Between; J. H. West, 380
Laboratory Equipment, General, Some Points on, 377
Laboratory Equipment, A Miscellany of, 392
Lacquers, Modern, 484
Lancastrian Frankland Society, 373;
Laporte, Ltd., B., Opening of New Plant at, 435
Latex and Moulds: Para-nitrophenol as an Antiseptic Agent, 279
Latex, Moulded Goods from, 265
Latvian Production of Fertilisers, 30
"Laundry World, The"—New Benn Journal, 14
Lead, Refined Primary, Output in U.S 457
Leather, A New Type of, 293
Leather, Glove, Dyeing of; D. Woodroffe, 410

Legal Intelligence—

Ayrton Saunders & Co., Ltd. *v.* Jules Lang & Son, 465
British Celanese, Ltd. *v.* Courtaulds, Ltd., 141, 437, 461, 489, 512
Droop Aspro, Ltd., *v.* Fredk. Alexander Horsenail, 53
Fargher, Charles *v.* Thomas Hodgkinson, Preston and King, 272
Irving's Yeast Vite, Ltd. *v.* Frederick Alexander Horsenail, 82, 100, 151
Kneale, W. M. *v.* Lever Brothers, Ltd., 346
McEllins Chemicals, Ltd. *v.* Berry Hill Collieries, Ltd., 492
Polaris Co. and Globus Co. *v.* Unilever, Ltd., Lever Bros., Ltd., and De Nordiske Fabriker De-No-Fa, 514
Rayon Manufacturing Co., 105
Solidal Chemicals, Ltd. *v.* Lysol, Ltd., and A. J. Black, 150
Light, Controlled, for the Laboratory and Works, 386
Litharge, Manufacture of, 178
Lithopone Plant in Hungary, New, 439
Lithuania, Industries Using Chemicals, 369; Paint and Varnish Industry, 342
Liquids, Corrosive, The Handling of, 365
L.M.S. Railway Reorganisation. 236
London's Gas Supply in 1932, 141
Low Temperature Carbonisation, 110, 178, 224
Low Temperature Laboratories, 10
Luminous Discharge in Hydrogen-Filled Tubes, 334

M

Machinery Guards, The Need for Efficient, 576
Maintenance, Some Reflections on Repairs and; "Chemical Engineer," 233
Malaya, Trade with, 200
Management Factor in Industry, Manifesto on the, 1
Management Training for Business Executives, 113
Manchester University: Chair of Physical Chemistry—Dr. Michael Polanyi, 580
Manchurian Nitrogen Plant, 533
Manufacturers' Mass Meeting, 524
Measurement, Temperature and Pressure, 387
Melchett Medal for 1933, The, 357
Mellon Institute, Activities of the, 457
Mercury Market, German, 304
Metallurgy, the Chemical Engineer, 162; Effect of Science on, 454; Recent Developments, 412
Metals for Electrical Distribution, 366
Metering of Liquids, The Efficient, 77
Meters and Controllers in the Laboratory, 390
Mexico, Fertilisers in, 152
Midlands Chemists' Annual Dinner, 120
Mildew, Prevention of, 379
"Mind and the Machine," 367
Mirvale Chemical Co., Ltd., Fire at Works of, 289
Mixing Operations, Standard Equipment for, 114
Moisture Determination, 367
Molasses as a Fertiliser in Australia, 533
Molasses into France, Importation of, 63
Mole Destruction in France, 439
Molybdenum Industry in 1932, The, 532
Mond Laboratory at Cambridge, 110, 125
Monel Metal in Cast Iron Welds, 552
Moths, Clothes, Destruction of, 124
Moulding Inquiries and How to Meet Them, 286
Mozambique Oils and Oilseeds, 458

N

National Institute of Industrial Psychology, 217
National Physical Laboratory, Work at the, 427
National Union of Manufacturers, 524
Neutron, Knowledge of the, 508
New Brunswick, Large New Refinery in, 272
Newfoundland: Cod-liver Oil Exports, 76

News from the Allied Industries—

Artificial Silk, 15, 37, 59, 103, 126, 151, 179, 251, 273, 293, 318, 342, 416, 440, 466, 494, 514, 537, 559, 580
Beet Sugar, 224, 466, 580; Bleaching and Dyeing, 126; Brewing, 201; By-Product Coking, 466
Cement, 224, 251, 342, 416, 466, 537; China Clay, 59, 103, 151, 179, 251, 397, 466, 559, 580; Coal Distillation, 342, 397; Coking, 179

News from the Allied Industries—*cont.*

Distilleries, 59; Dyeing and Calico Printing, 293; Dyeing and Cleaning, 416, 514, 537; Dye Manufacture, 514
Explosives, 82
Fertilisers, 466, 559
Gases, Compressed, 494; Glass, 15, 318, 342, 440, 494, 580
Insecticides, 201, 251; Iron and Steel, 15, 37, 59, 126, 151, 179, 224, 251, 293, 318, 342, 369, 416, 440, 537, 559, 580
Margarine, 416, 537; Matches, 15, 37, 59, 82, 103, 201, 369, 416, 440, 537; Mineral Oil, 151, 179, 273, 318, 342, 397, 416, 466
Non-Ferrous Metals, 37, 59, 82, 103, 126, 151, 224, 273, 293, 416, 440, 494, 514
Paint and Varnish, 82, 251, 369; Paper, 37, 103, 293, 318, 397, 440; Petrol, 293; Plastics, 251; Pottery, 126, 273, 559
Rubber, 15, 59, 82, 103, 126, 224, 342, 369, 416, 580
Seed Crushing and Oil Cake, 273; Soap, 179, 201, 273, 318; Sugar, 37, 126, 179, 201, 251, 416
Tanning, 103, 369, 494
Whale Oil, 514, 537
"Newspaper World," The, 272
Nickel, The Dimethyl Glyoxime Reaction for; Edwin C. Righellato, 574
Nitrogen Production in Belgium, 438
Non-Ferrous Metals in the Food Industry 140
Non-Ferrous Metals Research, Progress in, 218
Norway: New Linseed Oil Plant, 533

O

Obituary—

Aitchison, Archibald, 585
Ball, Major Walter Craven, 563; Bayley, Francis Price, 346; Bennet, Alfred, 399; Bingham, William Scott, 296; Bott, Henry, 320; Brunt, J. D., 253
Campbell, George, 40; Clanahan, Hugh Cumming, 296; Colgate, Gilbert, 40; Cook, Albert S., 40
Dickson, Archibald Annan, 253
Edmunds, W. T., 517
George, Thomas, 182
Hawdon, Frederick George, 563; Henshaw, Albert Mayon, 62; Hunt, Arthur Victor, 128
Jeynes, A. G., 296
Kerr, Hugh, 86
Major, William, 182; Malcolm, G. W., 228; Malcolm, James, 40; Martindale, William Harrison, 346
Nathan, Louis J., 541
Palmer, Major G. M., 563; Peters, Lewis Samuel, 182; Plagemann, Ernst Albert Ludwig, 373; Plant, Joseph, 499
Queeny, John Francis, 320
Ree, Dr. Alfred, 193; Robertson, William, 499
Saville, J. W., 62; Smith, Lady, 86
Thevenaz, Dr. William, 128; Thomas, Dr. John, 62, 80; Thompson, Claude M., 40; Thomson, Professor J. H., 272; Twynam, Thomas, 40
Veno, Sir William, 228
Waters, Alexander, 182; Waters, A. F. C., 346; Watson, William, 516; Wessel, Hjalmar, 563; Wiggin, Alfred Harold, 105; Wilson, John W., 204; Wood, James (West Lothian), 563; Wood, James (Liverpool), 320
Oil and Colour Chemists' Association, 61, 99, 137, 164, 214, 240, 288, 333, 453, 455
Oil Bath Liquid, A New, 365
Oil, Coconut, Empire Copra and, 95
Oil Fuel Hydrogenation, 198
Oil, High-Grade, Discovery in Ontario, 151
Oils, Electrical Insulating, 491
Oils, Heavy, The Duty on, 423
Oil, Tar, as Diesel Engine Fuel, 199
Olefines, Hydration of, 125
Ores, Chemical, in South Africa, 30
Ottawa Agreement Changes, 367
Over-Efficiency, Dangers of, 123
Oxy-Acetylene Welding and Metal Cutting, 239
Oxygen Industry in Lithuania, 368
Ozone, Commercial Applications of, 325

P

Paint and Varnish Systems, Colloidal Behaviour in, 453
Paint, as Wood Preservative, 191; Materials, Future, 102; Problems in Building Research, 102; Research Station, Teddington, 504; Accelerated Weathering, 214; Rubber, Chlorinated, 304; The Plasticity of, 333; Varnishes and Lacquers, Physical Tests on, 137
Palestine Exhibition, Anglo-, 536
Panama Coconut Exports, 361
Pans, Boiling, A Battery of 150-gallon Monel Metal Steam-Jacketed, 523
Parliament, Chemical Matters in, 176, 198, 224, 415
Patent, Petition for Extension of; Turner, Charles, and the Turner Trust, Ltd., 492
Patents Act and the Chemical Industry, The, 21
Peat, Ammoniated: A New Fertiliser Material, 192
Perkin Medal, Presentation of the, 31
"Permutit," 126

Personal

Albright, W. A., 471; Arnaud, F. W. F., 224; Ashley, Percy, W. L. 524.
Bagnall, G. H., 277; Bailey, F. J., 17; Ball, H. Standish, 373; Bergmann, Professor Max, 105; Blundell, Lionel, 61; Bone, Professor W. A., 493; Bragg, Sir William, 421; Briggs, Dr. Lyman J., 399; Burgin, Dr. Leslie, 435; Burnard, J. B., 105; Burns, H. M., 61; Burton, Dr. D., 17.
Cadman, Sir John, 292, 357; Calder, W. A. S., 405; Campbell, G. R., 471; Chance, Walter L., 346; Clayton, Sir George, 524, 565; Cumming, W. M., 516.
Dow, James, 471; Drysdale, Dr. C. V., 62; Dunn, Dr. J. T., 245, 320; Dunstan, Dr. A. E., 128.
Edmond, F., 62; Elsden, Alfred Vincent, 17; Emeleus, Dr. Harry J., 86; Ennis, Lawrence, 17; Ewing, Sir Alfred, 563; Eyre, W. S., 61
Forster, Dr. M. O., 524, 563; Fox, Dr. J. J., 227; Friedmann, Dr. R., 61
Gaede, Professor Wolfgang, 125, 574; Gandy, J. B., 182; Gleichert, H. W., 182; Grant, James, 421; Greene, Frank Arnold, 105; Greenhalgh, Mr. H. R., 541; Gurney, Dr. R. W., 471
Haas, Professor, 499; Haber, Professor Fritz, 438; Haldane, J. B. S., 86, 105; Harden, Dr. A., 499; Harrington, E. C., 253; Hartog, Arthur, 471; Heilbron, Dr. I. M., 471; Henbrey, H. J., 471; Henderson, Professor G. G., 301; Heriot, T. P. H., 227; Hear, T. P., 154; Hopkins, Sir Frederick Gowland, 61, 499, 563; Hoyle, W., 471; Huddleston, Sir A. J. C., 499; Hudspeth, Major H. M., 62; Hyslop W. M., 86
Innes, R. Faraday, 17
Johnson, Alex, 154; Jones, H. Humphreys, 105; Jones, J. E. Lennard-, 320; Jurgens, Anton, 373
Kewley, James, 17; King, F. J., 128; King, Dr. J. G., 128
Lamb, Arthur, 40; Lamb, N. C., 17; Lapworth, Professor Arthur, 193; Lees, Sir William Clare, 86; Leishman, John, 445; Lever, David, 227; Leverhulme, Viscount, 159; Light, Louis, 17; Lotbiniere, Major-General A. C. Joly de, 373; Lund, F., 296; Lytton, Rt. Hon. Earl of, 524
Macdonogh, Sir George, 62; Magee, Dr. H. E., 499; Makinson, Charles, 17; Marsden, Arthur, 227; Massie-Blomfield, H., 541; McCulloch, H., 541; Melchett, Lord, 287, 516; Melchett, late Lord, 105, 340; McGowan, Sir Harry, 17, 86; Middleton, Lord, 86; Miller, H. A., 61; Molitor, Dr. Hans, 61; Morgan, E. D., 182; Morgan, Professor, G. T., 303; Morley, Kenneth-Headlam-, 182; Morton, Andrew Home-, 317
Nicholson, William J., 227; Nieuwland, Fr. Julius A., 346
Oenslager, George, 31
Parkes, Alan S., 320; Paton, Gordon Stuart, 17; Paull, W. H., 421; Phillips, Charles D., 320; Pirie, H. L., 128; Pullin, V. E., 524; Pybus, P. J., 296
Radcliffe, L. G., 128; Reavell, J. Arthur, 438; Reese, L., 40
Sherrington, Sir Charles, 128; Smith, Ian, 227; Smith, Richard Tilden-, 40; Smith, Sydney William, 17; Stratham, Richard N., 373; Stuart, Charles Maddock, 227; Symington, William, 253
Taylor, Claude, 563; Taylor, A. J. T., 61; Turnbull, Dr. A., 17
Underwood, Dr. A. J. V., 541

Personal—*continued.*
Vanstone, Dr. Ernest, 445; Varley, Ltd., John, 114
Weiss, Dr. E. C., 296; Winder, Arthur S., 253; Wintle, A. W. M., 399; Wiseman, A. M., 516; Wood, Dr. Frederick C., 204; Woolcock, W. J. U., 17
Young, A. E., 154
Personnel in Industry, 263
Peruvian Market for Calcium Arsenate, 380
Petroleum as a Source of Paint Materials, 240
Petroleum Chemistry, 332
Petroleum, Cracked, Purification of, 59
Phenols, Manufacture of Chlorinated, 430
Phosphate Deposits in Morocco, 492
Phosphate Production in Algeria, 456
Phosphate Rock, Exports of, from Egypt, 493
Phosphates on the Danube, 262
Phosphorus to be Produced in Italy, 201
Physical Society, The, 291, 574, Exhibition, 7
Plant, Chemical, Depreciation of: Financial Accounting: S. Howard Withey, 72
Plant, High Pressure Steam, 200
Plant, Modern Chemical Plant, The Welded Tank in, 28
Plasticisers, Research on New, 484
Plastics, Moulding Trade, Growth of the, 285; What they are, 384; A new Raw Material, 196; Exhibition, 282, 294, 317, 384, 428, 516, 522, 563, 567, 575; In the Paint Industry, 522; Modern, in Industry, 117; Celluloid and Casein Types, 428; Cellulose Materials, 212
Platinum Metals, Technology of the, 146
Poland: Chemical Industry, 506; Dye Trade, Drop in, 386; Potash Prices Reduced, 316; Synthetic Resin Production, 152
Polarimeter, A New British, 389
Politicians, Humbugging: Sir Ernest Benn and Industrial Outlook, 54
Preservation of Chemical Works Plant, 242
Priestley, Joseph—the Father of Modern Chemistry: Ronald A. Martineau Dixon, 243
Problems in Industry: Papers at Nottingham Section of S.C.I., 244
Purchasing Chemical Plants: Tests and Guarantees; J. H. West, 3

Q

Questions and Answers, 385, 488, 535

R

Radium Production in Canada, 119
Railways, Research on the, 236
Rayon Trade Organisation, 211
Reagents, Special, for the Analytical Laboratory, 411
Refractories, Modern, Manufacture of, 358
Refresher Courses for Chemists, 396
Research in Industry: Views of Prof. Gibbs and Dr. Underwood, 177
Research, The Aims of; J. H. West, 215
Resins, Phenolic, 575
Rhodesia, Southern, Trade in, 98
Road Research Board, A, 493
Rose Water, Essence of, 30
Rosin Derivatives, New, 452
Rotary Kiln, The, 364
Rotenone as an Insecticide, 568
Roumanian Alkali Industry, The, 316
Royal Institution, 253, 436, 446
Royal Sanitary Institute, 65, 76
Royal Scottish Society of Arts, 112
Royal Society, 508
Royal Society of Arts, 234, 259, 431
Rubber: Chlorinated, The Applications of, 352; Chlorinated, No Illusions About, (Dr. W. Krumbhaar), 507; Chlorinated, Compound, Manufacture of, 465; Research: Lord Irwin's Bill, 436; In the Chemical Trade, 14; In the Motor Industry, 175; Latex in Industry, 188; Research Association, 158; Synthetic, 66
Russia: Chemical Factories, New, 270; Fertiliser Industry Development, 30; Patent Laws, 2; Undersupply of Dyes in, 386

S

Safeguarding of Industries Act, 86, 253, 421, 470
Safety, American Council, 532
Safety First Association, National, 356
"Safety First" Principles, 576
Salt Trade in British India, 64
Salt Works, Assessment of, 36
Samples, Standard, 367
Sampling, Average Error in, 264
Santonin Manufacture in India, 30
Scale Prevention in the Boiler: E. A. Smith, 570
Science and Industry: Over-production Denounced, 54
Sepiolite in Soviet Russia, Extraction of, 30
Shades, Fashion for Autumn, 1933, 338
Sheffield University, Department of Metallurgy New Equipment, 53
Shipping, Coastwise, Help for, 380
Ships, Compositions for the Protection of, 99
Sicily: Essential Oils, 80; Sulphur Trade, 369
Sieves and Screens, Industrial, 353
Silica Gel in Solvent Recovery, 480
Society of Chemical Industry, 1, 14, 21, 27, 40, 54, 67, 78, 86, 89, 117, 122, 123, 124, 140, 167, 176, 199, 204, 212, 214, 227, 228, 244, 263, 317, 338, 366, 412, 493, 508, 509, 513, 517; Annual Meeting, 551
Society of Dyers and Colourists, 74, 253, 317, 337
Society of Glass Technology, 198, 414
Society of Public Analysts, 124, 224, 337, 434
Sodium Aluminate in Water Treatment, 308
Sodium Nitrate, Manufacture of, 10
Sodium Silicate, Trade in, 273
Solvent, Industrial, Recovery, 351
Solvent Recovery Practice, 107
Solvent Recovery Technique, Recent Progress in; S. Reginald Price, 478
Solvent Recovery, The Economics of; J. G. M. Bevan, 485
Solvents, Non-Inflammable, 476
South Africa: Fruit Canning, 81; Production of Salt in, 439
Soviet Chemical Industry, 98
Soxhlet Extractor, An Improved, 388
Spain: British Trade Openings in, 426; Calcium Carbide and Cyanamide, 95; Exports of Turpentine and Resin, 152; Paint and Varnish Trade, 290; Potash Exports, 494; Potash Industry, 439; Superphosphate Factory, 30
Spectro-Photometry, Industrial, 449
Spectroscopic Investigations, Improved Means for, 70
Spectrum Analysis, 219
Staffordshire Iron and Steel Institute, 126
Steels, Stainless, for Chemical Plant, 235
Stereo-Chemistry and Physics, 334
Stock Solution, Evaporation of, 438
Stoneware, Chemical, 169
Stripping Agent, A New, 337
Sugar as Motor Fuel, 272
Sugar, Synthetic, 543
Sugar, Wood, Production of, 306
Sulphate of Ammonia Trade in 1931-32, The Trend of, 26
Sulphate Pulp, Bleaching, Swedish Method of, 30
Sulphuric Acid and Fertilisers, 289
Sulphuric Acid Chamber Process, Interpretation of 30
Sulphur Monoxide, Properties of, 548
Sulphur, New Zealand, Imports of, 30
Superphosphate Trade, International, 200
Sweden: Bleaching Powder Imports, 480; Paper Manufacture, 363; Export of Chemicals, 267; Paper Pulp Industry, 397

T

Tar: Coke Oven, Utilisation of, 450; Road Making (Professor Dr. Mallison), 573; Primary and High Temperature, 125.
Taxation, Industry and, 65
Temperature and Pressure Measurement, 387
Temperature Control, A Modern Method of, 197
Temperatures in the Laboratory, High, 57
Temperature, The Industrial Measurement of, 381
Tennis Tournament, Chemical Industry Lawn, 271, 291, 315, 336, 366, 385, 413, 445, 465, 490, 514, 541, 557
Textile Finishing, 548; Recent Developments in: L. G. Laurie, 572
Textile Institute, 516, 548, 572
Textile Printing, Recent Developments in, 327
Thorium and the Rare Earths, 101
Timber, Control of Dry Rot in, 107
Titanium Pigment Industry, Development of the, 435
Trade, British Overseas Chemical, 58, 142, 200, 246, 360, 462, 578
Trade Marks Committee, Chemical, 368
Transparent Paper: Manufacture from Scrap Celluloid, 575
Tungsten, Manufacture of, 11
Tuscany, The Natural Steam Springs of, 431

U

Ultra-Violet Light, Analysis by, 220
Unemployed Chemists, 473
Unemployment, Lord Melchett and, 290
United States: Bauxite Industry in 1932, 316; Chemical Trade, 35; Exports of Chemical Products, 527; Industrial and Engineering Chemistry, 310
University of Birmingham Chemical Society, 101
Uruguay: Compressed Gases in, 369

V

Vegetable Ghee in India, 439
Venezuela, Economic Conditions in, 6
Vitamins in Food Manufacture, 27

W

Wages, Chemical, 199, 315
Wages in the Dyeing Industry, 579
Warfare, Modern, The Use of Chemicals in, 28
Warfare, Poison Gas in, 354
Water Hyacinth, Indian, 286
Water, Measuring Impurity in, 391
Water Pollution Research Board, Annual Report of the, 335
Water Treatment Chemicals, 369
Water Treatment, Sodium Aluminate in, 308
Weights, Gram, A New Division of the Smaller: Dr. F. Sartorius, 384
Wellcome Research Institution, 541
Welded Plant in the Chemical Industry, 237
Welding, Scientific, Chemical Plant Repairs by; C. W. Brett, 525
Welwyn: A Town of New Factories, 158
West Cumberland Society of Chemists and Engineers, 264
Wool Bleaching Process, New, 461
Wool Industries Research, 364
Woollen Goods, The Chlorinating Treatment of, 355
Works Equipment News, 55, 147, 248, 339, 463, 554
World Economic Conference, 543
World Petroleum Congress, 558
World Power Conference, 2, 113, 471, 575

X

X-Rays and Crystal Structure, 177

Y

Yeast, Pure, Industrial Production of, 98
Yugoslavia: Chemical Imports Exceed Exports, 152; Production of Paint, 316

Z

Zinc Oxide Plant in Canada, 367

INDEX TO METALLURGICAL SECTION

Alloys, Aluminium, Foundry Practice for, 2
Aluminium: Hygienic Aspects of, 24; In Brass Alloys, 13; Large Castings, 26; Protective Coatings, 11
Basic Steel Jubilee, A, 4
Birmingham Metallurgical Society, 36
Brazing Alloys Containing Silver, 35
British Industries Fair, 4
Building Research Special Report No. 19 of the D.S.I.R., 29
Canadian Iron and Steel Production 18
Chemical Engineering Group, 9
China Clay, Alumina Crucibles, 18
Chrome-Nickel Steel, 11
Corrosion Research on Light Metals, 9
Creep, Weld Decay and Erosion, 20
Events on the Eve of 1933, 1
Heat, Waste, Recovery of, 32
Indian Mineral Production, 23
Institute of Metals, The, 23
Iron and Steel: Outlook, 7, 23; Re-organisation Scheme, 25; Institute, Annual Meeting of the, 27
Iron, Cast, Grey, Properties of, 31
Lead Bullion, The Continuous Refining of, 5
Lead, Ternary Alloys of, 29
Metallgesellschaft Profits, 4
Metallurgy, Recent Contributions to, 31
Metals, Age Hardening in, 31
Metal, White, Residues, The Smelting of Complex, 17
Monel Metal and Pure Nickel, 15
National Federation of Iron and Steel Manufacturers, 18
Nickel Chromium Austenitic Steels, 23
Nickel, Fifty Years of, 34
Nickel Iron Alloys, Dilational Properties of, 22
Non-Ferrous Metallurgy, New Knowledge in, 19
Non-Ferrous Metal Mould Castings; F. R. Francis, 3
Ores, Poor Cupriferous, The Working-up of, 33
Oxides, Refractory, for Crucible Manufacture, 29
Patents, Metallurgical, Some Recent, 6, 12, 24, 30, 36
Phosphorus in Metallurgy, 14
Protective Coatings, Research on, 4
Regenerators for Open Hearth Furnaces, 32
Rust Prevention in Idle Steam Boilers, 23
Selenium in Alloy Steels, 24
Silumin Castings, Recent Advances in, 21
Soviet Russia: Aluminium in the U.S.S.R., 11
Steel Castings Research, 26
Steel: Cheaper British, 8, 32; Industry Developments, 16; Industry Re-organisation, 20; New Quality of Structural, 18
Steel Merger Scheme (Dorman Long & Co. Ltd., and the South Durham Steel and Iron Co. Ltd.), 20, 28
United States: Copper Industry, 8; Progress in the, 26
Wire, Enamelled Copper, Standard for, 2
Zinc Production in Canada, 35

Printed by THE PRESS AT COOMBELANDS, LTD., London and Addlestone, and Published by BENN BROTHERS, LTD., at Bouverie House, 154 Fleet Street E.C.4. SATURDAY, July 8, 1933.